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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,885	10/19/2005	Laurent AlhadeF		9890

7590  
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EXAMINER
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NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2622

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09/30/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,885	<b>Applicant(s)</b> ALHADEF, LAURENT	
	<b>Examiner</b> LUONG T. NGUYEN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 06/23/2010 have been fully considered but they are not persuasive.

In re pages 9-10, Applicant argues that Alhadeef (US 7,187,401) does not disclose or suggest the claimed features of a method of embedding images from other sources within images captured by a viewing device in motion, by transmitting and analyzing the positional coordinates of the viewing device during acquisition of a sequence of video images while the viewing device is moving, the method including a preliminary step consisting of attaching the viewing device to a first subsystem which contains an inertial sensing unit delivering data signals representing spatial coordinates and an instantaneous inclination of the viewing device with respect to a reference point; a first step of acquiring, in real time, said data signals during the movement of the viewing device along a trajectory (t) and transmitting the data signals to a second subsystem which includes equipment for processing the data signals using a stored software program; a second step of processing the data signals, either in real time and/or deferred for later analysis, so as to determine positional coordinates, as recited in independent claim 1.

In response to applicant's arguments, the recitation "*a method of embedding images from other sources within images captured by a viewing device in motion, by transmitting and analyzing the positional coordinates of the viewing device during acquisition of a sequence of video images while the viewing device is moving*" has not been given patentable weight because

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the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 1, the Examiner considers that Alhadeef et al. (US 7,180,401) does disclose the following steps:

a preliminary step consisting of attaching said viewing device (video camera, figures 2A-2C, column 7, lines 35-49) to a first subsystem (first subsystem 2, figures 2A-2C, column 7, lines 35-49) which contains an inertial sensing unit (GPS 38, figure 2A, column 8, lines 4-15, lines 28-34) delivering data signals representing the spatial coordinates and instantaneous inclination and the focal length of said viewing device with respect to the said defined reference point (see figure 1);

a first step of acquiring, in real time, of said data signals during the movement of said viewing device along said trajectory (column 11, lines 33-44; column 13, lines 32-67) and the transmission of said data signals to a second subsystem (second subsystem 4, figures 2A-2C, column 8, lines 53-61) which includes equipment for processing said data signals using a stored software program (column 15, lines 14-23); and

a second step of processing the said data signals, either in real time or deferred for later analysis, so as to determine said coordinates of position (the position of the video camera can be

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determined by image processing, column 13, lines 60-67), and improving the quality of the acquired data by applying an image analysis procedure.

### *Claim Objections*

2. Claims 1-12 are objected to because of the following informalities:

Claim 1 (line 12), “spatial coordinates instantaneous inclination” should be changed to --spatial coordinates and instantaneous inclination--.

Claim 1 (line 13), “the focal lenght” should be changed to --the focal length--.

Claim 1 (lines 21-22), “said coordinates of position” should be changed to --said spatial coordinates of said view device--.

Claim 1 (line 22), “the acquired data” should be changed to --the acquired data signals--.

Claim 2 (line 3), “said coordinates” should be changed to --said spatial coordinates--.

Claim 2 (line 5), “the inclination data” should be changed to --the instantaneous inclination--.

Claim 2 (line 6), “the said viesing device” should be changed to --said viewing device--.

Claim 2 (lines 7-8), “said images (I)” should be changed to --said sequence of video images (I)”--.

Claim 3 (line 2), “according to claims 1” should be changed to --according to claim 1--.

Claim 4 (lines 7-8), “said inertial sensing unit. is done by” should be changed to --said inertial sensing unit is done by--.

Claim 4 (line 9), “an image analysis procedure” should be changed to --the image analysis procedure--.

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Claim 4 (line 9), “the software” should be changed to --the stored software program--.

Claim 4 (lines 9-10), “the data processing unit” should be changed to --a data processing unit--.

Claim 5 (line 3), “the images (I)” should be changed to --the sequence of video images (I)--.

Claim 5 (lines 9-10), “data signals” should be changed to --the data signals--.

Claim 5 (line 6), “said viewing device” should be changed to --said viewing device--.

Claim 6 (lines 2-9), “The method according to claim 1, the data signals” should be changed to --The method according to claim 1, wherein the data signals--.

Claim 7 (lines 2-12), “wherein it is included connecting devices for transmitting the signals” should be changed to -- wherein a connecting device is included for transmitting the data signals--.

Claim 7 (line 13), “the first to the second subsystem” should be changed to --the first subsystem to the second subsystem--.

Claim 9 (line 2), “method of claims 1” should be changed to --method of claim 1--.

Claim 10 (lines 1-2), “The method of claims 9” should be changed to --The method of claim 9--.

Claim 10 (line 4), “the images (I)” should be changed to --the sequence of video images (I)--.

Claim 10 (lines 6-7), “components;” should be changed to --components:--.

Claim 10 (line 17), “A microphone” should be changed to --A microphone--.

Claim 11 (line 2), “acquired data” should be changed to --acquired data signals--.

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Claim 11 (line 2), “an image analysis procedure” should be changed to --the image analysis procedure--.

Claim 11 (line 2), “the software” should be changed to --the stored software program--.

Claim 12 (line 2), “the said acquired data” should be changed to --said acquired data signals--.

Claim 12 (line 2), “the hard drive” should be changed to --a hard drive--.

Claim 12 (lines 2-3), “the said data processing unit” should be changed to --a data processing unit--.

Claims 2-12 are objected as being dependent from claim 1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4-6, 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The specification does not have support for the amended limitation “wherein the error corrections to said position data streams delivered by said inertial sensing unit is done by applying an image analysis procedure” as amended in claim 4 (lines 6-9).

The specification does not have support for the amended limitation “wherein the integration of the focal planes (FP) of images (I) is obtained by acquiring data identifying the focal length used by said viewing device and by capturing, in real time, data signals representing the spatial coordinates and the instantaneous inclination of said viewing device” as amended in claim 5.

The specification does not have support for the amended limitation “the data signals and the focal length are used in a manner so as to visualize, in real time, the images captured by said viewing device into a preexisting three-dimensional virtual decor by using software for three dimensional reconstitution” as amended in claim 6.

Claim 11 is rejected as being dependent from claim 4.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 (line 6) recites the limitation “the” in “the error corrections”.



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Claim 4 (lines 6-7) recites the limitation “said” in “said positional data streams”.

There is insufficient antecedent basis for this limitation in the claim.

Claim 11 is rejected as being dependent from claim 4.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Alhadeef et al. (US 7,187,401).

Regarding claim 1, Alhadeef et al. discloses a method of embedding images from other sources within images captured by a viewing device in motion, by transmitting and analyzing the positional coordinates of the viewing device during acquisition of a sequence of video images (I) while the viewing device is moving through space along a trajectory (t) determined with respect to a defined reference point, the method comprising:

a preliminary step consisting of attaching said viewing device (video camera, figures 2A-2C, column 7, lines 35-49) to a first subsystem (first subsystem 2, figures 2A-2C, column 7, lines 35-49) which contains an inertial sensing unit (GPS 38, figure 2A, column 8, lines 4-15, lines 28-34) delivering data signals representing the spatial coordinates and instantaneous inclination and

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the focal length of said viewing device with respect to the said defined reference point (see figure 1);

a first step of acquiring, in real time, of said data signals during the movement of said viewing device along said trajectory (column 11, lines 33-44; column 13, lines 32-67) and the transmission of said data signals to a second subsystem (second subsystem 4, figures 2A-2C, column 8, lines 53-61) which includes equipment for processing said data signals using a stored software program (column 15, lines 14-23); and

a second step of processing the said data signals, either in real time or deferred for later analysis, so as to determine said coordinates of position (the position of the video camera can be determined by image processing, column 13, lines 60-67), and improving the quality of the acquired data by applying an image analysis procedure.

Regarding claim 2, Alhadeef et al. discloses said coordinates represent the position of said viewing device along the said trajectory in relation to the axes of said orthonormal trihedron of reference and the inclination data represents the angles of azimuth, elevation and roll around the axis of said viewing device said axis intersecting the center of the focal plane of said images (column 12, lines 17-22).

Regarding claim 3, Alhadeef et al. discloses wherein, during a supplementary preliminary step, said inertial sensing unit is initialized and standardized with respect to a reference point of origin (column 11, lines 34-64).

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Regarding claim 7, Alhadeef et al. discloses wherein it is included connecting devices (cable 5, figure 2B, column 9, lines 35-47) for transmitting the signals from the first to the second subsystem.

Regarding claim 8, Alhadeef et al. discloses wherein the viewing device is a video camera (video camera, figures 2A-2C, column 7, lines 35-49).

Regarding claim 9, Alhadeef et al. discloses wherein the inertial sensing unit includes at least one gyrometer and one accelerometer with three distinct, non-coplanar axes (gyros and accelerometers, column 22, lines 10-23).

Regarding claim 10, Alhadeef et al. discloses a microphone (a microphone 37, figure 2A, column 8, lines 45-50).

Regarding claim 12, Alhadeef et al. discloses comprising a supplementary preliminary step consists of storing (storing acquire data step 705, figure 3, column 14, line 62 – column 15, line 16) the said acquired data within the hard drive data storage module of the said data processing unit.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571)272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUONG T NGUYEN/  
Primary Examiner, Art Unit 2622  
09/27/10